Quick Reference Guide to Fire Research Websites, Databases, & Texts

GENERAL FIRE RESEARCH AND TOOLS WEBSITES:

Fire Effects Information System (FEIS)

http://www.fs.fed.us/database/feis/ FEIS summarizes and synthesizes research about living organisms in the United States - their biology, ecology, and relationship to fire. The "Rainbow Series" fire effects reports can be downloaded from the FEIS home page. Citations used in FEIS can be searched through the Citation Retrieval System website: http://feis-crs.org/

FRAMES (Fire Research and Management Exchange System)

http://frames.nbii.gov FRAMES is a systematic method of exchanging information and transferring technology between wildland fire researchers, managers, and other stakeholders. The goal is to make wildland fire research tools, data, and other information resources easy to find, access, distribute, compare, and use. FRAMES currently hosts web pages for several projects and programs including FIREMON (Fire Effects Monitoring and Inventory Protocol), Accessing Burn Severity, Fire Regime Condition Class (FRCC), Fire History Analysis and Exploration System (FHAES), First Order Fire Effects Model (FOFEM), and more.

FIREHouse (The Northwest and Alaska Fire Research Clearinghouse)

http://www.fs.fed.us/pnw/fera/firehouse FIREHouse provides information about fire science and technology relevant to Washington, Oregon, Idaho and Alaska. It includes the Alaska Fire and Fuels Research Map and the Alaska Fire Effects Reference Database (see the "Alaska Fire Websites" section below for more information).

Pacific Northwest Research Station Fire Tools and Databases

http://www.fs.fed.us/pnw/publications/firetools.shtml Provides access to PNW fire research products such as: the Fuel Characteristic Classification System (FCCS), CONSUME, Fire Emission Production Simulator (FEPS), the Natural Fuels Photo Series, BlueSky, and the Ventilation Climate Information System (VCIS), MAPSS (Mapped Atmosphere-Plant-Soil System), My Fuel Treatment Planner, Fire Emission Tradeoff Model, Vegetation Dynamics Development Tool (VDDT), Tool for Exploratory Landscape Scenario Analysis (TELSA), the Forest Inventory and Analysis Biomass Summarization System (FIA BioSum), and more.

Missoula Fire Sciences Lab and the Systems for Environmental Management (SEM)

http://www.firelab.org and http://fire.org These websites provide information about the Missoula Fire Sciences Lab and SEM's fire behavior research, fire chemistry research, and fire ecology/ fuels research. Applications include: BehavePlus, Fire Area Simulator (FARSITE), FireFamilyPlus, FlamMap, First Order Fire Effects Model (FOFEM), NEXUS (crown fire hazard analysis software), and the Fire Effects Monitoring and Inventory System (FIREMON).

National Park Service Fire Effects Monitoring website

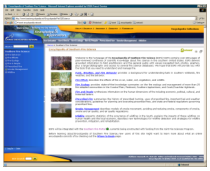
http://www.nps.gov/fire/fire/fir_eco_mon_fmh.cfm Provides an overview of fire effects monitoring occurring on NPS lands, access to the Fire Effects Monitoring Handbook.

LANDFIRE (LANDSCAPE FIRE AND RESOURCE MANAGEMENT PLANNING TOOLS PROJECT)

http://www.landfire.gov LANDFIRE data products include layers of vegetation composition and structure, surface and canopy fuel characteristics, historical fire regimes, and ecosystem status. These products are produced at scales that may be useful for prioritizing and planning hazardous fuel reduction and ecosystem restoration projects; however, the applicability of data products varies by location and specific use, and products may need to be adjusted by local users. LANDFIRE products for Alaska are scheduled to be available in 2009.

ADVANCES IN FIRE PRACTICE

http://www.wildfirelessons.net/AFP.aspx?Page=AFPOverview The Advances in Fire Practice website is a subset of the Lessons Learned Center website. It's goal is to spotlight innovation in the fire profession, provide access to some of the latest and most useful fire science being produced, and spur constructive discussions on the challenges and issues facing fire professionals.



ENCYCLOPEDIA OF SOUTHERN FIRE SCIENCE

http://www.forestencyclopedia.net/Encyclopedia/Fire%20Science The ESFS contains peer-reviewed syntheses of scientific knowledge about fire science in the southern U.S. While the website focuses on the southern U.S., many of the syntheses (e.g., fire behavior, fire effects, smoke management, etc.) are general enough to be useful outside of that region.

TALL TIMBERS E.V. KOMAREK FIRE ECOLOGY DATABASE

http://www.talltimbers.org/info/fedbintro.htm This database provides access to bibliographic records for a unique, extensive collection of fire ecology literature. Although international in scope, the database emphasizes the southeastern United States, the USA, and North America. Historical and current works are included.

401SERIES.NET

http://401series.net/ The 401Series website is designed to accommodate the educational needs of fire professionals affected by the IFPM 401 standards. The website provides information about the academic programs and courses offered through the University of Idaho College of Natural Resources and through other institutions.

PACIFIC WILDLAND FIRE SCIENCES LAB

http://www.fs.fed.us/pnw/pwfsl/ This website provides access to three different fire focused research teams including the Fire and Environmental Research Applications Team (FERA), the Atmosphere and Fire Interactions Research Team (AirFire), and the Rural Urban Wildland Interactions Team (UWI).

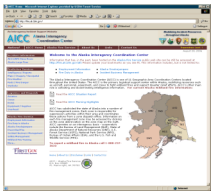
JOINT FIRE SCIENCE PROGRAM (JFSP WEBSITE)

http://www.firescience.gov/ JFSP is an interagency research, development, and applications partnership between the U.S. Department of the Interior and the U.S. Department of Agriculture. This website provides summaries and deliverables from research funded by the program, as access to "Fire Science Digest," a publication summarizing a current wildland fire issue, and "Fire Science Briefs," summarizing recent project findings.

MONITORING TRENDS IN BURN SEVERITY (MTBS)

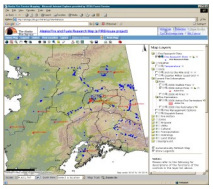
http://mtbs.gov/ Monitoring trends in burn severity (MTBS) is an on-going project designed to map burn severity and fire perimeters from 1984 through the present. This website provides downloadable dNBR burn severity data sets and other mapping products. Methods for assessing remotely sensed burn severity (dNBR) and field methods using the Composite Burn Index (CBI) can be found at: http://frames.nbii.gov/projects/firemon/FIREMON_LandscapeAssessment.pdf

ALASKA SPECIFIC WEBSITES:



ALASKA INTERAGENCY COORDINATION CENTER WEBSITE

http://fire.ak.blm.gov/ The Alaska Interagency Coordination Center (AICC) is the primary logistical support center within Alaska, mobilizing resources such as aircraft, personnel, equipment, and crews to fight wildland fires and support disaster relief efforts. AICC's other main role is collecting and disseminating Intelligence information.

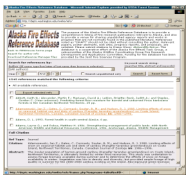


ALASKA FIRE AND FUELS RESEARCH MAP (FIREHOUSE)

http://afsmaps.blm.gov/imf/imf.jsp?site=firehouse (or go to the AICC Maps/Imagery/Geospatial website at http://fire.ak.blm.gov/predsvcs/maps.php, select "Statewide Fires" and then select the "Fire and Fuels Research" theme from the map toolbar. The Alaska Fire and Fuels Research Map provides online site-level information and locations for fire and fuels-related studies through an ArcIMS™ map interface. It will also provide access to the recently funded Alaska Boreal Forest Fire History Database (access information about this project through the FIREHouse website: http://depts.washington.edu/nwfire/project.php?projectID=492).

ALASKA FIRE PORTAL

http://frames.nbii.gov/alaska The Alaska Fire Portal is one of several geographic areas supported by FRAMES (Fire Research and Management Exchange System). The Alaska Fire Portal provides fire science and technology information specific to Alaska and the boreal forests of western Canada. The FRAMES Resource Cataloging System is also accessible from this site (through the "Browse Records" tab) and allows users to search documents, projects, tools, date, web pages, and programs



ALASKA FIRE EFFECTS REFERENCE DATABASE (FIREHOUSE)

http://depts.washington.edu/nwfire/refs/ The Alaska Fire Effects Reference Database provides a listing of fire research publications relevant to Alaska, and also provides a venue for sharing unpublished agency reports and works in progress that are not normally found in the published literature. This database is also accessible from the Alaska Fire Portal (http://frames.nbii.gov/alaska).

DIGITAL PHOTO SERIES (DPS): ALASKA PHOTO SERIES

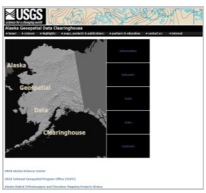
http://depts.washington.edu/nwfire/dps/ The Digital Photo Series provides the Natural Fuels Photo Series data in electronic form. The two Alaska photo series: *Volume II: black spruce and white spruce types in Alaska*; and *Volume IIa: hardwoods with spruce in Alaska* area available through the Digital Photo Series.

ALASKA FOREST HEALTH PROTECTION (FHP) PROGRAM WEBSITE

http://www.fs.fed.us/r10/spf/fhp/index.htm The FHP website provides basic information about damaging outbreaks of forest insects, diseases, and invasive plants in Alaska. Additionally, it provides timely survey and monitoring information, and technical and financial assistance, to Federal, State, and private land managers so they can prevent, suppress, and control outbreaks of forest pests.

NON-NATIVE PLANTS OF ALASKA

http://akweeds.uaa.alaska.edu/ This website provides access to the AKEPIC (Alaska Exotic Plant Information Clearinghouse) database and other information pertaining to the inventory and mapping of non-native plants in Alaska.



ALASKA GEOSPATIAL DATA CLEARINGHOUSE

http://agdc.usgs.gov/ The Alaska Geographic Data Committee supports the coordination of geospatial data activities and promotes data sharing among the Federal, state, Native, local, commercial, and non-governmental member agencies. The Clearinghouse was developed for this purpose.

ALASKA RESOURCES LIBRARY AND INFORMATION SERVICES (ARLIS)

http://www.arlis.org/ Alaska Resources Library and Information Services provides access to natural and cultural resources information, including online access to the catalog of holdings as well as some electronic databases.

BONANZA CREEK LONG TERM ECOLOGICAL RESEARCH SITE

http://www.lter.uaf.edu The overall objective of the LTER is to document the major controls over forest dynamics, biogeochemistry, and disturbance and their interactions in the face of a changing climate. This website provides access to data and publications (on the new bibliography search page; http://www.lter.uaf.edu/pubs/bibliography_search_master.cfm) resulting from LTER scientists' research.

ALASKA FIRE SCIENCE CONSORTIUM

http://akfireconsortium.uaf.edu The Alaska Fire Science Consortium (AFSC) is one of eight regional consortia funded by the Joint Fire Science Program in development of a national fire science delivery network. The AFSC provides links to the latest publications, hosts informative webinars, facilitates workshops, provides updates on on-going research projects, and more.

ALASKA CENTER FOR CLIMATE ASSESSMENT & POLICY (ACCAP)—FOREST IMPACTS & WILDFIRE

http://ine.uaf.edu/accap/wild_fires.html The mission of the ACCAP is to assess the socio-economic and biophysical impacts of climate variability in Alaska, including those impacts on wildfire. Their website host several climate and fire related projects including "Improving Seasonal Fire Predictions and Information Services in Alaska for Regional and National Fire Resource Planning.", (http://ine.uaf.edu/accap/research/season_fire_prediction.htm).

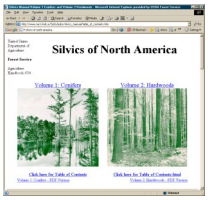
REFERENCE WEBSITES:

PLANTS DATABASE

http://plants.usda.gov The PLANTS Database provides standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens of the U.S. and its territories.

THE GYMNOSPERM DATABASE

http://www.conifers.org The Gymnosperm Database is a source of information on conifers and their allies. It is a readily accessible, scientifically accurate source of information on the classification, description, ecology and uses of this culturally and ecologically important group of plants.



SILVICS OF NORTH AMERICA

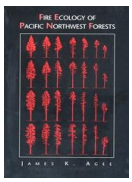
http://www.na.fs.fed.us/Spfo/pubs/silvics_manual/table_of_contents.htm

Online version of *Burns, R.M. and B.H. Honkala, tech. coords. 1990. Silvics of North America: 1. Conifers; 2. Hardwoods. Agriculture Handbook 654. USDA Forest Service, Washington, DC. vol.2, 877 p.* The silvical characteristics of about 200 forest tree species and varieties are described. Most are native to the 50 United States and Puerto Rico, but a few are introduced and naturalized. Information on habitat, life history, and genetics is given for 15 genera, 63 species, and 20 varieties of conifers and for 58 genera, 128 species, and 6 varieties of hardwoods.

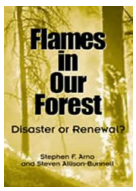
NATURESERVE EXPLORER
http://www.natureserve.org/explorer/ NatureServe Explorer is a source for information on more than 65,000 plants, animals, and ecosystems of the United States and Canada. Explorer includes particularly in-depth coverage for rare and endangered species. Boreal Alaska plant associations information has yet to be included as of August 2006.

TREESEARCH: FOREST SERVICE RESEARCH PUBLICATIONS
http://www.treesearch.fs.fed.us/ Treesearch is an online system for locating and delivering publications by Research and Development scientists in the USDA Forest Service. Publications in the collection include research monographs published by the agency as well as papers written by Forest Service scientists but published by other organizations in their journals, conference proceedings, or books.

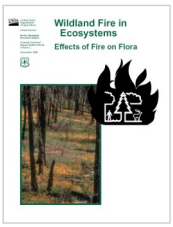
GENERAL FIRE TEXTS:



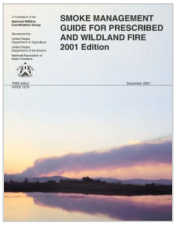
Agee, J.K. 1993. Fire Ecology of Pacific Northwest Forests. Island Press, Washington DC. 493 p.



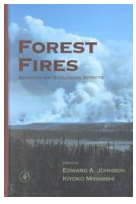
Arno, S.F. and S. Allison-Bunnell. 2002. Flames in Our Forest: Disaster or Renewal? Island Press, Washington DC. 227 p.



Brown, J.K., and J.K. Smith (editors). 2000. Wildland fire in ecosystems: effects of fire on flora. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-42-vol. 2, Ogden, UT. 257 p.



Hardy, C.C., R.D. Ottmar, J.L. Peterson, J.E. Core and P. Seamon (editors). 2001. Smoke management guide for prescribed and wildland fire, 2001 edition. PMS 420-2. National Wildfire Coordinating Group, National Interagency Fire Center, Boise, ID. 226 p.



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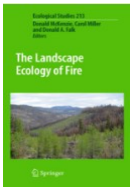

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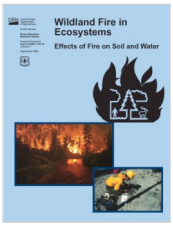
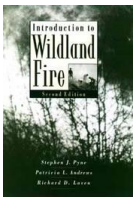
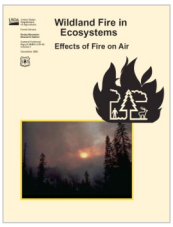


Neary, D.G., K.C. Ryan and L.F. DeBano. 2005. Wildland fire in ecosystems: effects of fire on soils and water. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-42-vol. 4, Ogden, UT. 250 p.

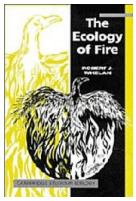


Pyne, S.J., P.L. Andrews and R.D. Laven. 1996. Introduction to Wildland Fire, 2nd ed. John Wiley and Sons, Inc., New York, NY. 769 p.

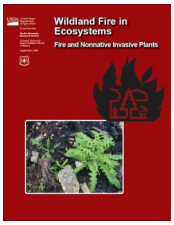
Smith, J.K. (editor). 2000. Wildland fire in ecosystems: effects of fire on fauna. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-42-vol. 1, Ogden, UT. 83 p.



Sandberg, D.V., R.D. Ottmar, J.L. Peterson and J. Core. 2002. Wildland fire in ecosystems: effects of fire on air. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-42-vol. 5, Ogden, UT. 79 p.

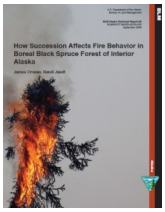


Whelan, R.J. 1995. The Ecology of Fire. Cambridge University Press, Cambridge, Great Britain. 346 p.

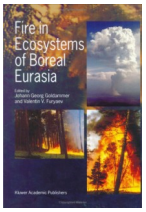


Zouhar, K., J.K. Smith, S. Sunderland, and M.L. Brooks. 2008. Wildland fire in ecosystems: fire and nonnative invasive plants. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-42-vol. 6, Odgen, UT.

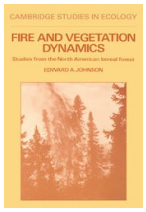
BOREAL FIRE TEXTS:



Cronon, J. and R. Jandt. 2008. How Succession Affects Fire Behavior in Boreal Black Spruce Forest of Interior Alaska. US DOI Bureau of Land Management, BLM Alaska Tech. Rep. 59. Anchorage, AK. 15 p.



Goldammer, J.G. and V.V. Furyaev (editors). 1996. Fire in Ecosystems of Boreal Eurasia. Kluwer Academic Publishers, Dordrecht, The Netherlands. 528 p.



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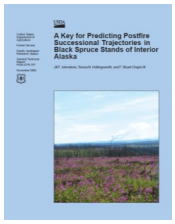
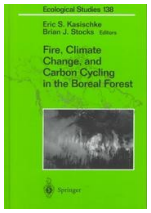


Johnstone J.F., T.N. Hollingsworth, and F.S. Chapin III. 2008. A key for predicting postfire successional trajectories in black spruce stands of interior Alaska. USDA Pacific Northwest Research Station, General Technical Report PNW-GTR-767. Portland, OR. 37 p.



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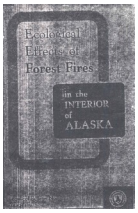
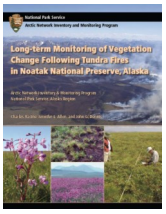


Lutz, H.J. 1956. Ecological effects of forest fires in the interior of Alaska. USDA Technical Bulletin No. 1133. 121 p.



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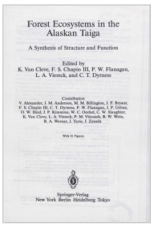
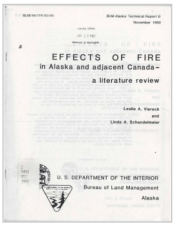
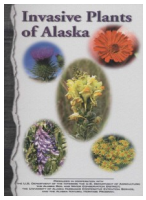


Van Cleve, K. F.S. Chapin III, P.W. Flanagan, L.A. Viereck and C.T. Dyrness (editors). 1986. Forest Ecosystems in the Alaska Taiga: A Synthesis of Structure and Function. Springer-Verlag, New York. 230 p.



Viereck, L.A. and L.A. Schandelmeier. 1980. Effects of fire in Alaska and adjacent Canada - a literature review. BLM-Alaska Technical Report 6 BLM/AK/TR-80/06. 124 pp.

MISC. PUBLICATIONS (GUIDES, VEGETATION CLASSIFICATION REFERENCES, PHOTO SERIES, FUEL TYPES, AND FUEL MODELS):



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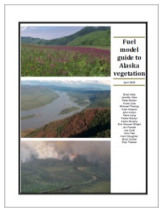

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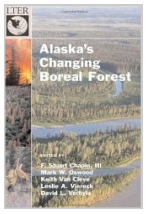

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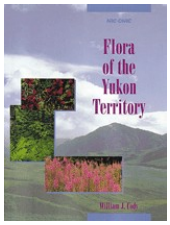

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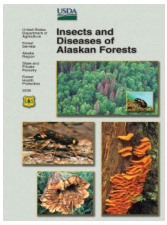

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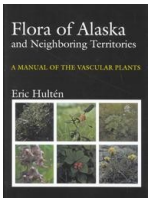

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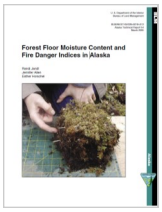

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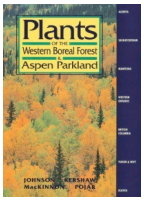

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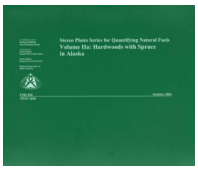

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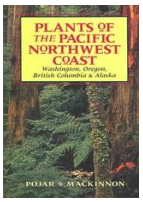

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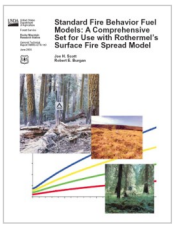

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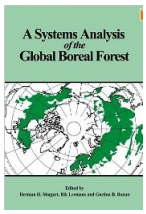

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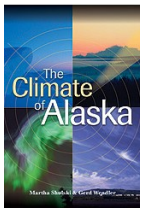

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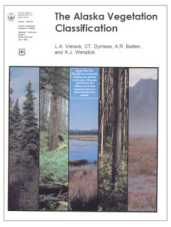

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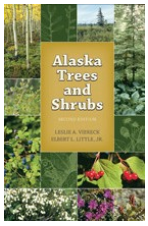

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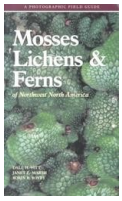

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More information about these publications, including links to digital copies (when available), can be found in the **Alaska Fire Effects Reference Database** (http://depts.washington.edu/nwfire/refs/) or by visiting the **Alaska Fire Portal** (http://frames.nbii.gov/alaska) and using the "Browse Records" tab.

Please note this quick reference guide is **NOT a comprehensive listing of Alaska fire websites and texts.**